

DESCRIPTION OF THE FEMALE OF *EUCARTERIA SUBVITTATA* MOORE (COLEOPTERA: LUCANIDAE)

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Abstract

The female of *Eucarteria subvittata* Moore is described from specimens taken from the Central Tablelands district of New South Wales. Collection details are also discussed.

Introduction

When *Eucarteria subvittata* Moore was described, no females had been collected and the author surmised that the habits of the female were probably more cryptic than those of the male (Moore 1994). The lack of females in collections is partly explained by collection data reported here, where a ratio of approximately 30 males to 1 female is recorded.

The collection site, Polblue Swamp in the Central Tablelands of New South Wales, is situated at an altitude of 1450 metres. This site is a sphagnum moss swamp, dissected by a meandering channel and with a walking track bordering the swamp. The exact collection area, located between the swamp and Barrington Tops Forest Road, is typical of the alpine plateau, with grass tussocks and small woody shrubs beneath a canopy of *Eucalyptus pauciflora* Spreng. and *Eucalyptus stellulata* DC. The exotic weed *Cytisus scoparius* (L.) Link is also found in the area.

Eucarteria subvittata Moore

(Fig. 1)

Material examined. NEW SOUTH WALES: 2 ♀♀, vicinity of Polblue Swamp, Barrington Tops State Forest, 11.xii.1997, G. J. Krake (in Australian National Insect Collection, Canberra and the author's collection).

Description of female (Fig. 1). Mostly dark brownish-black with bronze reflections; antennae, palpi, canthi, pronotal and elytral margins, humeri and tibiae lighter reddish-brown; scales grey. Head transverse, coarsely punctate, not squamose beside eyes as in male; mandibles short, concave, rugose and weakly cuspidate internally (not bicuspidate as in male), with no obvious difference between right and left, with apex of both more rounded than male, with left mandible overlapping that of right when clenched; eyes narrowly divided by canthi, protruding more in front of eyes than in male; mentum small, flat and triangular, mostly covered with scales; clypeus small and rounded, not visible from dorsal view. Pronotum transverse (3.2 x 2.2 mm), convex, coarsely punctate, sparsely squamose except on disc, widest at hind third; margins crenulate and more rounded in front two-thirds and less obliquely contracted to base than in the male, giving the appearance of a more rounded pronotum than in the male. Elytra rugose, lightly striate on disc; intervals sparsely squamose (although most scales worn in both specimens); widest at mid section but wider in relation to length than male,

appearing more ovate; raised humeri more rounded than in male; oblique pale vittae absent in females. Legs hirsute; tibiae broader than in male, fore tibiae externally armed with 2 large teeth and 3-4 smaller teeth reducing in size towards femoral joint; mid and hind tibiae armed in external mid section with small protrusion, more rounded in hind tibiae; tarsi approximately one third shorter than in male. Length (including mandibles) 8 mm, maximum width 3.8 mm.

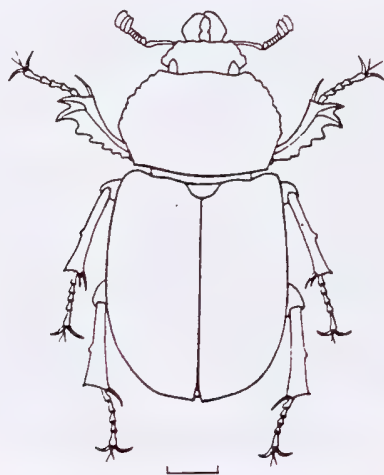


Fig. 1. *Eucarteria subvittata*, female, general habitus. Length, 8 mm. Scale = 1 mm.

Discussion

Although the type of this genus (*E. floralis* Lea) was described as being floricolous (Lea 1914) and some male specimens of *E. subvittata* were labelled as having been collected on flowers (Moore 1994), no specimens collected by the present author were found on flowers. Most of the specimens (59 males and 2 females) were taken on the alpine grass tussocks (*Poa caespitosa* G. Forst.) bordering the swamp. Two specimens were collected on dead stalks of the exotic broom plant and one on foliage of *Hakea microcarpa* R. Br. All specimens collected on grass tussocks were within the canopy range of eucalypts bordering the swamp in an area of approximately 150 m². Over a period of one hour between 11.45 and 12.45 only one specimen was observed in flight, most being rather inactive and easily picked by hand from the grass stalks. All males collected were fresh with scales intact, while the two females had more worn elytra. One pair was observed mating. The larval host is unknown.

From these observations one could speculate that the males had either recently emerged from the eucalypt roots underlying the grass tussocks and/or the dead logs and branches lying in the grass, or they had been sheltering there from the previous night. The number and concentration present would support the former hypothesis. The presence of only two females with worn elytra suggests that they had emerged earlier and had already mated, perhaps even before they had emerged (J. Hasenpusch, pers. comm.) and/or naturally occur in lower numbers than the males. Hopefully, as other collectors gather more collection data, the habits of this enigmatic species, particularly the female, will become clearer.

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References

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